

## REMARKS

Upon entry of the foregoing Amendment, claims 1 and 3-6 are pending in the application. Claim 1 has been amended. Support for the instant amendment exists at least on page 2, line 36 – page 3, line 4. No claims are cancelled or newly added. As such, Applicant believes that this Amendment does not add new matter. In view of the foregoing Amendment and following Remarks, allowance of all the pending claims is requested.

### **REJECTION UNDER 35 U.S.C. § 112**

The Examiner has rejected claims 1 and 3-6 under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with the written description requirement. Office Action at 2. In particular, the Examiner alleges that the amendment filed November 22, 2006 raises issues of new matter because Applicants have allegedly failed to point out literal support for the amended proportions of Sn, Zn, Mn, P, and Fe contained therein. Applicant traverses this rejection.

More particularly, the proportions of Sn, Zn, Mn, P, and Fe previously recited in claim 1 are identical to the proportions that were presented in original claim 2. Thus, the recited proportions are literally supported by the original disclosure. As such, the previous amendment did not raise any issues of new matter, as alleged by the Examiner. For at least this reason, the rejection is improper and must be withdrawn.

Further, the present amendment recites an amended phosphorus range spanning from 0.011 to 0.05% by weight-percent, which is narrower than the previously recited range of 0.001 to 0.05% by weight-percent. Therefore, the presently recited range is implicit in the previously recited range. The present amendment does not constitute new matter for at least this reason, and therefore the rejection remains improper and must be withdrawn.

### **REJECTION UNDER 35 U.S.C. § 103**

The Examiner has rejected claims 1 and 3-6 under 35 U.S.C. § 103 as allegedly being unpatentable over by U.S. Patent No. 6,346,215 to Boegel et al. ("Boegel"). Office Action at 3.

Further, the Examiner has rejected claims 1 and 3-6 under § 103 as allegedly being unpatentable over by U.S. Patent No. 5,487,867 to Singh ("Singh"). Office Action at 3. Applicant traverses these rejections because the Examiner has failed to establish a *prima facie* case of obviousness, for at least the reason that the references relied upon by the Examiner, either alone or in combination with one another, do not disclose, teach, or suggest all the features of the claimed invention.

More particularly, Boegel does not disclose, teach, or suggest at least the feature of an alloy having a composition (in weight-percent) of "P 0.011 to 0.05 %" and "Fe 0.001 to 0.02 %," as recited in claim 1, for example. Rather, Boegel indicates that "in the presence of iron, high phosphorus contents lead to the formation of rough iron phosphide particles which may interfere with the building of the structure. Therefore, phosphorus should be present in a mass ratio of iron to phosphorus of 2/1 in order to ensure a favorable structure of the alloy through freely precipitating iron." Boegel at col. 4, lines 31-37.

As such, "to avoid iron-phosphide particles in the alloy structure, the phosphorus content is adjusted to the iron concentration such that the iron content/phosphorus content is greater than 2." Boegel at col. 5, lines 41-50. By contrast, claim 1 recites a range of phosphorus from "0.011 to 0.05 %" and iron from "0.001 to 0.02 %," in which the ratio of iron to phosphorus is always less than 2. For example, 0.02 % is the highest concentration of iron recited in claim 1, while 0.011 % is the lowest concentration of phosphorus recited in claim 1. In this example, which represents the highest possible ratio of iron to phosphorus recited in claim 1, the iron to phosphorus ratio is approximately 1.82 to 1.

Accordingly, because Boegel requires an "iron content/phosphorus content [of] greater than 2," Boegel does not disclose, teach, or suggest at least these ranges recited by the claimed invention. For at least this reason, the rejections based on Boegel are improper and must be withdrawn.

Furthermore, Singh does not disclose, teach, or suggest at least the feature of a "nickel-free alloy . . . having properties of resilience," as recited in claim 1, for example. Rather, Singh relates to "bismuth-containing copper base alloys which contain mischmetal or its rare earth equivalent." Singh at col. 2, lines 52-55. Singh expressly acknowledges that "For many years it

has been recognized that bismuth is brittle as cast in copper base alloys.” Singh at col. 2, lines 10-11. By contrast, the claimed alloy has been found to have “good deformability” and “special ductility,” allowing, for example, “the manufacturing of glasses frames having good resilience properties and therefore good everyday capability.” *E.g.*, Specification at 2, line 6 – 3, line 4.

Accordingly, Singh expressly indicates that the alloy disclosed therein is not a “nickel-free alloy . . . having properties of resilience,” as recited in claim 1, for example, because of the brittle nature of the essential bismuth element, among other things. As such, Singh does not disclose, teach, or suggest at least this feature of the claimed invention. For at least this reason, the rejections based on Singh are improper and must be withdrawn.

Claims 3-6 depend from and add features to claim 1. Thus, the rejections of these claims are likewise improper and must be withdrawn for at least the same reasons.

## CONCLUSION

Having addressed each of the foregoing rejections, it is respectfully submitted that a full and complete response has been made to the outstanding Office Action and, as such, the application is in condition for allowance. Notice to that effect is respectfully requested.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

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Respectfully submitted,

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